



Sharing the Wealth: Shrinking your Digital Footprint in Times of High Demand

As we adjust to teaching and working from home during the COVID-19 crisis, it's important to remember that not every student has fast and reliable access to resources delivered across the Internet. Some parts of the state have little to no access to broadband, and even areas with a robust infrastructure will see slower response times due to increased demand.

Following is a list of questions to consider, and suggestions that can decrease the demand your classes make upon the Internet, and in doing so, increase all students' access to instruction.

Are you using an LMS (Learning Management System)? Do you need to?

Many school districts employ the use of an LMS such as Moodle, Canvas, Blackboard, D2L, or one of literally dozens of others. Typically, an LMS, like many website building software platforms, utilizes a database to organize lessons, exams, media, and gradebooks into a convenient, user-friendly interface. If using an LMS, be sure that the web browser available to your students is fully compatible with your content.

While an LMS can help create an attractive frame from which to share your content, consider whether you really *need* an LMS. In the short term, will an e-mail message with an attachment or links to resources on the web suffice?

Are you using the most appropriate file types?

With bandwidth at a premium, the type of file you share can make a difference. Remember that your students will need the same application to view a file as you used to create the file, unless you save that file in another format such as .PDF (Portable Document Format). For example, using the same document as the source, saving as different file types produced the follow results:

Application:	Saved as:	File Size:
MS Word	MS Word	125KB
MS Word	HTML	86 KB
MS Word	PDF	68 KB
MS Word	Text	4 KB

If your document is entirely text, consider saving as a .TXT file. If your document contains graphics, consider saving as a .PDF. Also consider the file format of any essential graphics you've included in your lessons. Generally speaking, because of its high compression, JPEG is the preferred format for images delivered across the Internet.

Are you time shifting?

"Distance Education" is something of a misnomer, as most students using the Internet to access online content live near their schools. One of the key features of online education is that content is ideally available "anytime, anywhere." If students are all accessing the same content at the same time, there will be delays as the server struggles to deliver content. If content is made available at any time, demand can be spread out, and bottlenecks avoided.

Do you need video?

Some subjects naturally lend themselves to visual delivery, however, if your instructional video consists entirely of you speaking to the camera, consider recording your instruction as an audio file instead. Audio files in MP3 format require a fraction of the storage of a comparable "talking head" video.

Are all your eggs in the same basket?

Where is your LMS hosted? Does your school district have its own server on site, or is the service hosted in the cloud? If your server is on site, expect that access will be slow, especially if any media files are stored on that same server. Most LMS setups allow links to files served from different locations, so consider placing any video files on YouTube or Amazon to lighten the load on your own server.

Have you read the instructions?

Many reports are appearing warning of "zoombombing." Unwanted guests in your live video conference aren't necessarily hackers, just people who have joined an unsecured online environment. Zoom, and other videoconferencing platforms, can be as secure as you choose to make them. Before taking your class live, take the time to familiarize yourself with the application you're using. Remember, most applications are presented to you without tight security settings in order to allow free and easy use of them. It is up to *you* to secure your online class.

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